

Family of Medium Tactical Vehicles (FMTV)

Team Newsletter



Vol 1 Issue 22

LMTV 2 1/2 Ton / MTV 5 Ton and Trailers

December 2000

Use of Dial Indicator to inspect Driveshaft hinging

Use of Dial Indicator to inspect Driveshaft hinging. During a visit to Ft. Leonard Wood, soldiers indicated they are not checking hinging. This could become a real problem when the field starts throwing driveshafts.

Identifying that the Van Air Conditioner Kit, RPSTL figure 267 is incorrect.

Sheet 1 of 2 indicates that when ordering item 1, you will receive the Air Conditioner, that is incorrect. You will not receive the Air Conditioner as part of the kit (NSN 4130-01-456-0718, P/N 57K1947). The Air Conditioner must be ordered separately. The NSN for the Air Conditioner is 4120-00-974-7206.

M1088 / M1088A1 Tractor is capable of pulling the following Trailers:

- M127A2C,
- M128A2C, M129A2C
- M172, M172A1
- M373A2, M373A2C
- M871, M871A1, M871A2
- M967, M967A1, M969, M969A1, M970, M970A1
- MILVAN
- M270A1
- *M146 (MODIFIED IAW TB 43-0001-39-2, 1 APR '87)

* LIMITED TO HIGHWAY OPERATIONS ONLY.

Additional information regarding the above trailers (i.e. Trailer Load Weight, Minimum height of trailer W/legs, etc) can be found in those trailers Technical Manual.

M1088/M1088A1 Tractor, prior to towing a trailer, refer to TM 9-2320-366-10 to ensure the tractor can pull the trailer without damage to the vehicle.

Fifth Wheel

The next time you use your Tractor (M1088 / M1088A1), take a good look at what position the fifth wheel is in. Is it in the rear or in the front position or even the middle position? If it is in the rear or middle positions, **DO NOT HOOK UP YOUR TRAILER!** The fifth wheel **MUST** be in the front,

or forward position. The rear position is only used "ONLY" when you are loading the tractor/trailer onto a ship so you can obtain the correct angle. We are adding the following **CAUTION** to the next revision to the -10 TM. "**SLIDING FIFTH WHEEL MUST BE IN THE FRONT POSITION BEFORE COUPLING M1088 TRACTOR TO ANY TRAILER. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO EQUIPMENT**".

Also we are adding one more **CAUTION** to the TM: "**DO NOT EXCEED THE 22% (12.4) GRADE LIMITATIONS WHILE OPERATING THE M1088 TRACTOR. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO EQUIPMENT**". Please add this to your manual ASAP.

There are Reports the park brake would not hold.

The Field Service Representative (FSR) and TACOM are getting calls from units that report the park brake would not hold. We are finding a number of cases where the unit is plugging the front glad hand up because it leaks air. Instead of

fixing the leaks by servicing the one way check valve they are closing the valve off. This will not let the spring brake function properly and will let the truck roll when parked. It is imperative that units keep the glad hands vented properly

DRIVESHAFT YOKE END CAP BOLTS.

When you have to service the transmission filters on the LMTV or MTV, or remove the driveshafts for towing, or anytime you disturb the end cap bolts, you will have to order new Bolts for the End Cap on the Driveshaft. The part number and NSN are; PN CSH5-24-39, NSN 5305-01-479-7857. These are replacement bolts with a new design and are called torque head bolts. These new bolts have two heads; the smaller head is a breakaway head, that at 30 ft. lbs., breaks away. You don't even need a torque wrench for these new bolts; when the bolt is tightened down to the correct torque, the head of the bolt will break off. This will assure you are at the correct torque.

NSN FOR SNOW CHAINS FOR FMTV

The following NSN can be used by units that require snow chains for the LMTV or MTV. NSN 2540-00-933-9033. This is the correct NSN please make the update to your TM's AAL this will be in the next change to the TM's.

AIR DRYER

As the Operator of the MTV or LMTV, you must follow your After Operations Maintenance

Checks and Services and drain your Air Tanks daily. If this is not done, the Fuse Link in the Air Dryer will Freeze, and will have to be replaced. Save money and drain your Air Tanks daily!

New 2028 Mailing Address

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this publication. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Submit your DA Form 2028-2 (Recommended Changes to Equipment Technical Publications), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is <http://aeprs.ria.army.mil>. If you need a password, scroll down and click on "ACCESS REQUEST FORM". The DA Form 2028 is located in the ONLINE FORMS PROCESSING section of the AEPS. Fill out the form and click on SUBMIT. Using this form on the AEPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, fax or E-mail your letter, DA Form 2028, or DA Form 2028-2 direct to: Technical Publication Information Office, TACOM-RI, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. The email address is TACOM-TECH-PUBS@ria.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

BE WISE WHEN JUMPING OFF THE BACK OF TRUCKS

We have received reports that troops are getting hurt and losing fingers when jumping off the back of the cargo trucks. They are catching their rings on the troop seats. It is recommended that you use the ladder when dismounting from the vehicle. This is for your own safety. Please use caution at all times.

DIFFERENTIAL PARTS PROBLEM CORRECTED

The differential assembly and the housing in TM 9-2320-365-24P Fig 130, Items 3 and 34 and Fig 132, Items 3 and 34 or TM 9-2320-366-24P-1, Fig 156, Items 3 and 34, and Fig 159, Items 3 and 34 originally were erroneously listed under the same stock number (NSN 2520-01-361-5204). Corrective action has been completed with DLA and procurement of the correct item (differential assembly, item 3) are being made. Item 34 was removed from under NSN 2520-01-361-5204 and is being coded XD and should not have a NSN. Users should no longer have problems when ordering this part from the supply system. Make these changes to your current TM's.

ENGINE FRONT COVERS CRACKING? HERE IS A FIX TO HELP PREVENT IT.

There have been several reported failures of the front engine covers cracking on the FMTVs. This is due to the air compressor and/or alternator bracket bolts loosening up, causing the two components to vibrate, which in turn crack the front cover. The following is a procedure to prevent this. They are separated into two parts as follows:

ALTERNATOR BRACKET WASHERS REPLACEMENT

Use attached RPSTL TM 9-2320-365-24P, Fig 46 for art/callout references.

NOTE
Install sealing compound on all bolts prior to

installation. Loctite #271 (red) or equivalent meeting Mil-S-46163, Type 1, grade K is recommended.

LMTV and MTV procedures are the same. These procedures apply to all FMTVs (A0 and A1). A0 LMTV procedures shown.

Should additional information be required the following references are provided

LMTV References:

TM 9-2320-365-24P, Jun 98, Fig 46
TM 9-2320-365-20-3, Jun 98, para 7-2, 7-3, 7-4
TM 9-2320-365-34-2, Jun 98, para 11-2 and 12-4
TM 9-2320-365-10, Jun 98, para 2-22

MTV References:

TM 9-2320-366-24P-1, Sept 98, Fig 46
TM 9-2320-366-20-3, Sept 98, para 7-2, 7-3, 7-4
TM 9-2320-366-34-2, Sept 98, para 11-2 and 12-4
TM 9-2320-366-10, Sept 98, para 2-28

Parts Required:

6 ea lockwashers NSN 5310-01-470-2362.
1 ea sealing compound NSN 8030-00-148-9833 or locally procured equivalent.

1. Disconnect batteries (TM 9-2320-365-20-3, para 7-48 or TM 9-2320-366-20-3, para 7-57).

2. Raise cab (TM 9-2320-365-10, para 2-22 or TM 9-2320-366-10, para 2-28).

3. Remove one bolt (59) and

washer (58) from support bracket (57).

4. Position one new lockwasher (58) with bolt (59) onto support bracket (57).

5. Repeat steps (3) and (4) for the other bolt (59). Tighten bolts (59) to 121-147 ft lbs (164-200 Nm).

NOTE

To keep tension on alternator belts, Remove and install the alternator support bracket bolts one at a time.

6. Remove bolt (47), two washers (50) and nut (51) from belt adjusting arm (52).

7. Remove two bolts (49), washers (50), and belt adjusting arm (52) from alternator bracket (53).

8. Install belt adjusting arm (52), two bolts (49) and two new lockwashers (50) on alternator bracket (53). Tighten two bolts (49) to 18-22 ft lbs (24-30 Nm).

9. Install bolt (47), two new lockwashers (50) and nut (51) in belt adjusting arm (52). Tighten nut (51) to 18-22 ft lbs (24-30 Nm).

10. Check alternator belt tension (TM 9-2320-365-20-3 or TM 9-2320-366-20-3, para 7-3).

11. Lower cab (TM 9-2320-365-10, para 2-22 or TM 9-2320-366-10, para 2-28).

12. Connect batteries (TM 9-2320-365-20-3, para 7-48 or TM 9-2320-366-20-3, para 7-57).

13. Start engine (TM 9-2320-365-10 or TM 9-2320-366-10).

14. Check VOLTS gage for charge indication and if engine runs rough.

15. Shut down engine (TM 9-2320-365-10 or TM 9-2320-366-10).

AIR COMPRESSOR BRACKET WASHER REPLACEMENT

Use attached RPSTL TM 9-2320-365-24P, Fig 154 for art/callout references.

NOTE

Install sealing compound on all bolts prior to installation. Loctite #271 (red) or equivalent meeting Mil-S-46163, Type 1, grade K is recommended.

LMTV and MTV procedures are the same. These procedures apply to all FMTVs (A0 and A1). A0 LMTV procedures shown.

Should additional information be required the following references are provided

LMTV References: TM 9-2320-365-24P, Jun 98, Fig 154
TM 9-2320-365-20-3, Jun 98, para 7-2, 7-3, 7-4
TM 9-2320-365-34-2, Jun 98, para 11-2 and 12-4
TM 9-2320-365-10, Jun 98, para 2-22

MTV References: TM 9-2320-366-24P-1, Sept 98, Fig 204
TM 9-2320-366-20-3, Sept 98, para 7-2, 7-3, 7-4
TM 9-2320-366-34-2, Sept 98, para 11-2 and 12-4
TM 9-2320-366-10, Sept 98,

para 2-28

Parts Required:

6 ea lockwashers NSN 5310-01-470-2362

1 ea sealing compound NSN 8030-00-148-9833 or locally procured equivalent.

1. Disconnect batteries (TM 9-2320-365-20-3, para 7-48 or TM 9-2320-366-20-3, para 7-57).

2. Raise cab (TM 9-2320-365-10, para 2-22 or TM 9-2320-366-10, para 2-28).

NOTE

For ease of maintenance, remove one bracket mounting bolt at a time.

3. Remove bolt (7) and washer (19) from mounting bracket (2). Discard washer.

4. Position bolt (7) and one new lockwasher (19) on mounting bracket (2). Tighten bolt (7) to 43-52 ft lbs (58-71 Nm).

5. Remove two lower bracket bolts (6) and washers (5) from mounting bracket (2). Discard washers.

6. Position two new washers (5) with bolts (6) in mounting bracket (2). Tighten bolts (6) to 43-52 ft lbs (58-71Nm).

7. Remove upper bracket bolt (4) and washer (3) from support bracket (2).

8. Position new lockwasher (3) and upper bracket bolt (4) in support bracket (2). Tighten bolt (4) to 43-52 ft lbs (58-71 Nm).

9. Lower cab (TM 9-2320-365-10, para 2-22 or TM 9-2320-366-10, para 2-28).

10. Connect batteries (TM 9-2320-365-20-3, para 7-48 or TM 9-2320-366-20-3, para 7-57)

To Calculate the MEL

The FMTV Replacement Prices used when calculating the Maintenance Expenditure Limit (MEL) should appear in the next update to SB710-1-1. In the meantime, the costs to use are provided here:

Replacement LIN Nomenclature
Price, \$ NSN

T40329 LMTV Van-M1079A1
173422.57 2320-01-447-4938

T40329 LMTV Van-M1079A0
173422.57 2320-01-354-3384

T41036 MTV Cargo LVAD-1093A0
209135.07 2320-01-355-3063

T41135 MTV Cargo-M1083A1 w/w
144363.08 2320-01-447-3884

T41135 MTV Cargo-M1083A0 w/w
144363.08 2320-01-360-1895

T41203 MTV Cargo w/MHE- M1084A1
207777.36 2320-01-447-3887

T41203 MTV Cargo w/MHE- M1084A0
207777.36 2320-01-354-3387

T42063 LMTV Cargo LVAD-1081A0w/w
191825.42 2320-01-360-1899

T60081 LMTV Cargo-M1078A1
116922.02 2320-01-447-6343

T60081 LMTV Cargo-M1078A0
116922.02 2320-01-353-9098

T60149 LMTV Cargo-M1078A1 w/w
126157.13 2320-01-447-3888

T60149 LMTV Cargo-M1078A0 w/w
126157.13 2320-01-360-1898

T61239 MTV Tractor-M1088A1
151006.27 2320-01-447-3893

T61239 MTV Tractor-M1088A0
151006.27 2320-01-355-4332

T61307 MTV Tractor-M1088A1 w/w
160898.27 2320-01-447-3900

T61307 MTV Tractor-M1088A0 w/w
160898.27 2320-01-360-1892

T61704 MTV Cargo LWB- M1085A1
138043.92 2320-01-447-3891

T61704 MTV Cargo LWB-M1085A0
138043.92 2320-01-354-4530

T61908 MTV Cargo-M1083A1
136481.02 2320-01-447-3890

T61908 MTV Cargo-M1083A0
136481.02 2320-01-354-3386

T64911 MTV Dump-M1090A1
159591.72 2320-01-447-3899

T64911 MTV Dump-M1090A0
159591.72 2320-01-354-4529

T64979 MTV Dump-M1090A1 w/w
165354.72 2320-01-447-6344

T64979 MTV Dump-M1090A0 w/w
165354.72 2320-01-360-1893

T65526 MTV Dump LVAD-M1094A0
262292.38 2320-01-355-3062

T94709 MTV Wrecker-M1089A1
323749.97 2320-01-447-3892

T94709 MTV Wrecker-M1089A0
323749.97 2320-01-354-4528

Although the percentages for calculating the MEL were provided in a previous issue, here they are again.

Age in Years	MEL %
1 - 6	67
7	61
8	57
9	53
10	50
11	46
12	43
13	40
14	38
15	35
16	29

This MEL applies to all FMTV LINs/Models/NSNs.

FMTV M1079 VANS, WARNING

Operators of FMTV M1079 Vans. An inclinometer has been installed in your vehicle. It is there to provide you with a visual

reference when your mission requires you to traverse a side slope condition or uneven terrain. DO NOT allow your vehicle to go beyond 22 percent (12 degrees) side incline at GCW. (Gross Vehicle Weight) Any equipment loaded in or on your M1079 Van will raise the Center of Gravity (CG) of your vehicle. Ensure the heaviest items being stored or carried in the Van, are on, or near the floor of the Van. This will help ensure your van does not become unstable, if heavy items are stored or carried high on the walls of the inside of the van. This change in CG may be enough to cause your vehicle to become unstable and roll over if you exceed the 22 percent (12 degrees) limit. A WARNING to this effect will appear in the VAN OPERATION paragraph of TM 9-2320-365-10 at the next printing. (Sept 00 PS Mag. (Vol 01 Issue 21 Article 03)

Tire Chains and CTIS

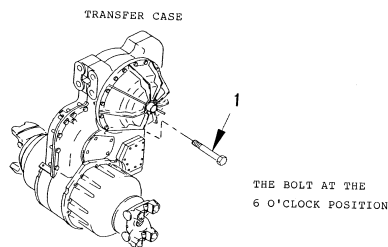
Do not operate the trucks in any CTIS mode other than highway when tire chains are installed, regardless of what the operators manual says. Operating with lower tire pressures could result in tire chain slippage and possible damage to the CTIS and vehicle, or injury to pedestrian personnel. We will be adding the appropriate WARNING statement to the TMs as soon as possible.

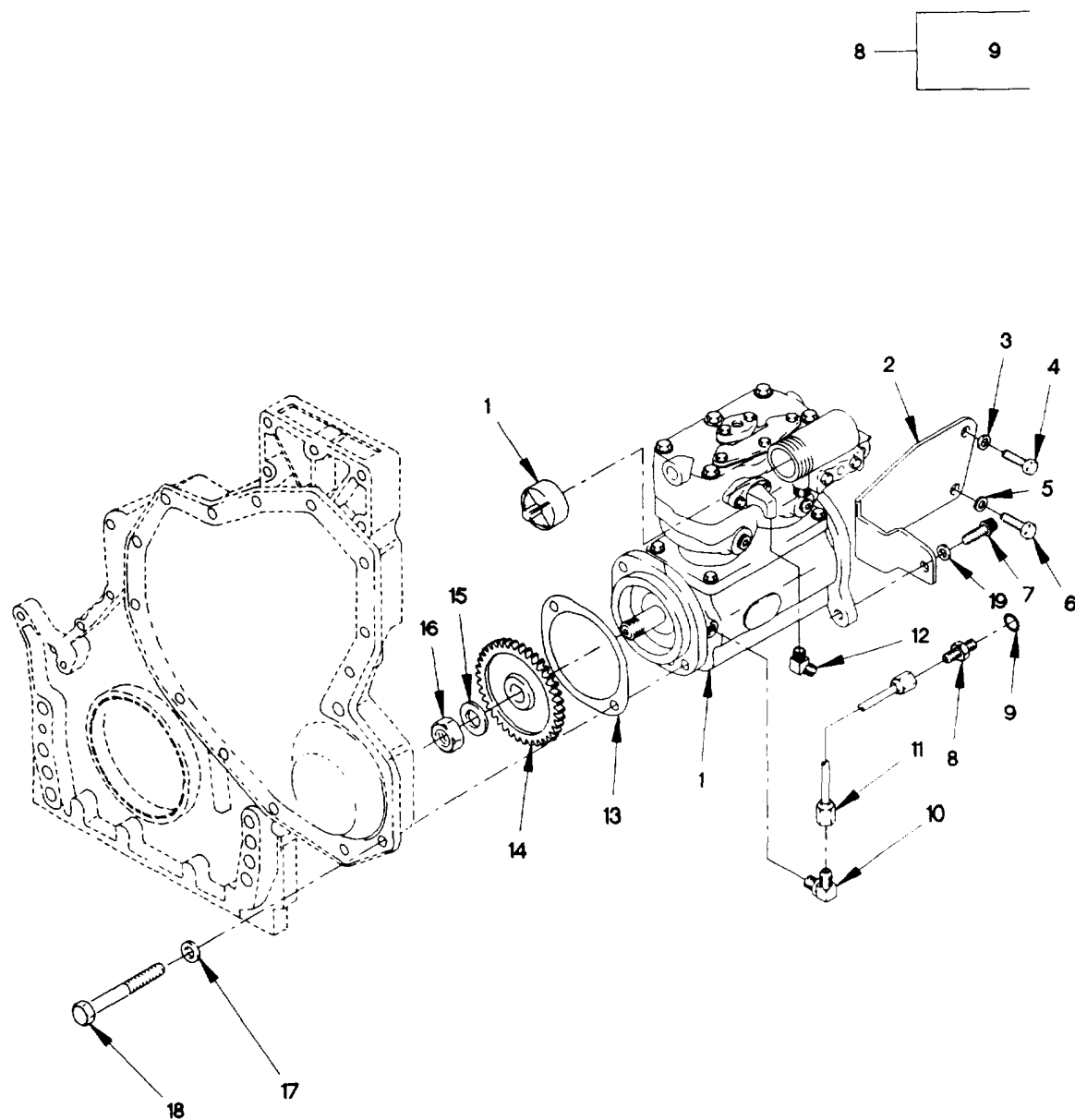
FMTVA0 - FREE C6 TRANSFER BOLTS FOR A LIMITED TIME (\$45.00 VALUE)

We have received reports from the field that a number of C6 Bolts on FMTVA0 Transfer cases have broken prematurely. Once this bolt breaks, replacement is much more difficult

(approximately 1 hour vs. 5 minutes to replace one not broken). Because of this premature breakage, Allison Transmission has redesigned the bolt. In view of this, we are strongly urging Units to replace the bolt before it breaks.

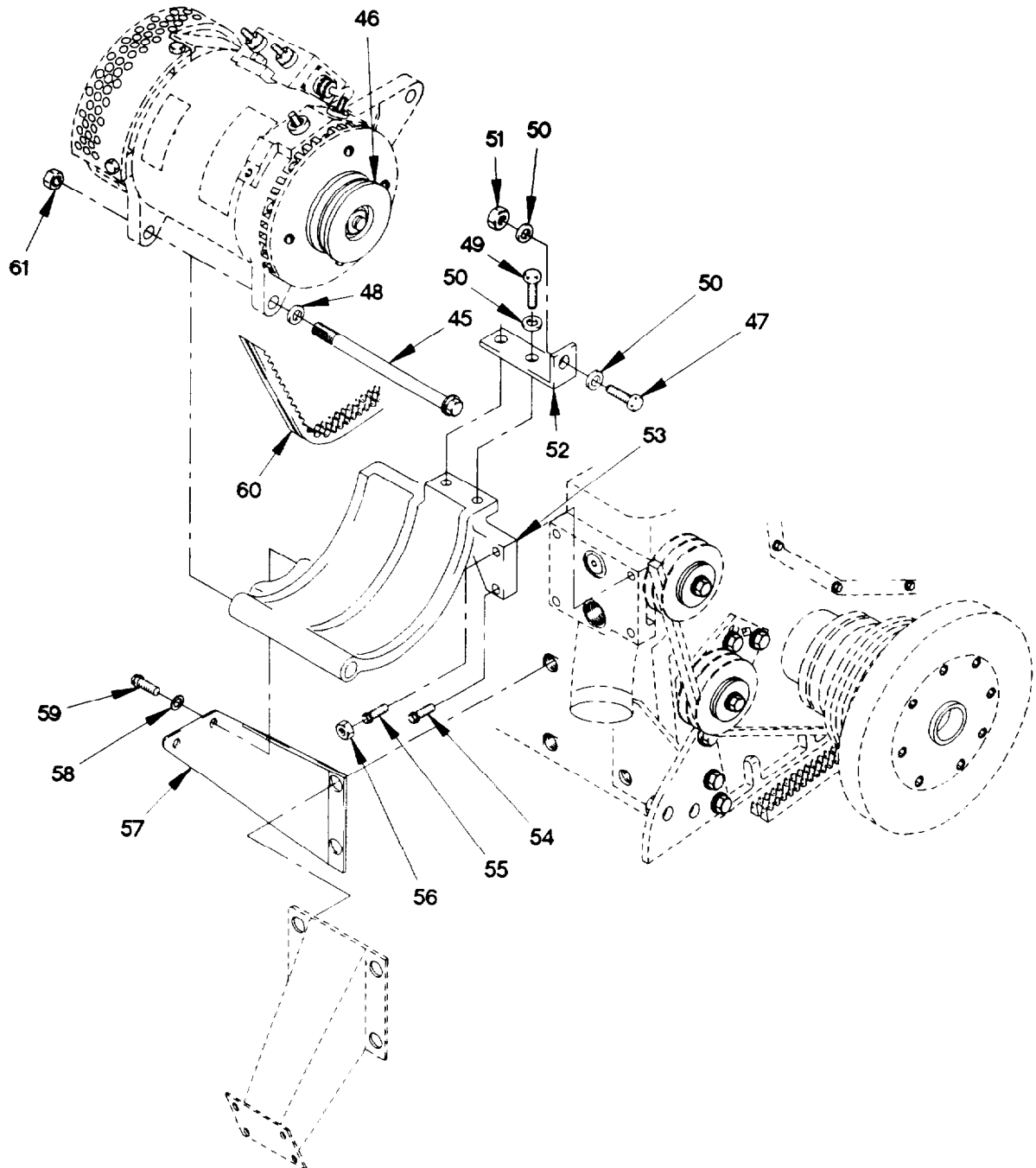
For a limited time, Stewart & Stevenson (S&S) will provide, at no cost to the units, the new design replacement 205-mm (6 o'clock position) Transfer Case Bolt, P/N 2957405, NSN 5306-01-480-3141, to replace the current bolt, for a period of 90 days, beginning 1 APR 01. NOTE: This offer is for 1 bolt per vehicle at your Installation. To obtain the replacement bolt, contact your local S&S Field Service Representative (FSR) at Ft. Drum, Lewis, Bragg, Hood, Stewart, Leonard Wood, Campbell, Huachuca, Carson, Hawaii and Korea. If you don't have a FSR at your site, call S&S at their toll free Number 1-800 221-3688 and ask for the Warranty Dept. You will need to provide the serial number of the vehicle(s) that the bolts will be replaced on and a mailing address, for shipment of the bolts. After the 90-day free issue period, the bolt will cost the unit approximately \$45.00 each. Again, the replacement of this bolt will only take about five minutes per vehicle, if you replace it before it breaks. If the bolt breaks, it could become a one-hour job.





1209A-1A

Figure 154. Air Compressor



0601A-3A

Figure 46. 100 AMP Alternator and Regulator (Sheet 3 of 3)



If you would like a copy of the FMTV Team Newsletter for your unit on a regular basis, Please fill out the form (Please be sure that you include your entire/complete address and street address) then mail it to the following address: ***Cmdr, U.S Tank-automotive and Armaments Command, ATTN: AMSTA-LC-CHMF (FMTV), Warren Michigan 48397-5000***

Organization (Abreviate if possible) _____

POC _____ **Street/Bldg Nmuber** _____

City/Fort _____ **State** _____ **ZIP** _____

Your E:Mail Address _____
(Please Print Clearly)

If this is your first issue and you would like to view all back issues, Please visit our web site at
(www.tacom.army.mil/gcss/pm_mtv/)

